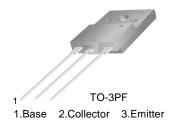


BU508AF

TV Horizontal Output Applications



NPN Triple Diffused Planar Silicon Transistor

Absolute Maximum Ratings $T_C=25^{\circ}C$ unless otherwise noted

Symbol	Parameter	Value	Units
V _{CES}	Collector-Emitter Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	700	V
V_{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current (DC)	5	Α
I _{CP}	*Collector Current (Pulse)	15	Α
P _C	Collector Dissipation (T _C =25°C)	60	W
T _J	Junction Temperature	150	°C
T _{STG}	Storage Temperature	- 65 ~ 150	°C

Electrical Characteristics $T_C=25$ °C unless otherwise noted

Parameter	Test Condition	Min.	Тур.	Max.	Units
* Collector-Emitter Sustaining Voltage	$I_C = 100 \text{mA}, I_B = 0$	700			V
Emitter-Base Breakdown Voltage	$I_E = 10 \text{mA}, I_C = 0$	5			V
Collector Cut-off Current	$V_{CE} = 1500V, V_{BE} = 0$			1	mA
Emitter Cut-off Current	$V_{EB} = 5V, I_{C} = 0$			10	mA
* DC Current Gain	$V_{CE} = 5V, I_{C} = 4.5A$	2.25			
* Collector-Emitter Saturation Voltage	$I_C = 4.5A, I_B = 2A$			1	V
* Base-Emitter Saturation Voltage	$I_C = 4.5A, I_B = 2A$			1.5	V
	* Collector-Emitter Sustaining Voltage Emitter-Base Breakdown Voltage Collector Cut-off Current Emitter Cut-off Current * DC Current Gain * Collector-Emitter Saturation Voltage	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	* Collector-Emitter Sustaining Voltage $I_C = 100$ mA, $I_B = 0$ 700 Emitter-Base Breakdown Voltage $I_E = 10$ mA, $I_C = 0$ 5 Collector Cut-off Current $V_{CE} = 1500$ V, $V_{BE} = 0$ Emitter Cut-off Current $V_{EB} = 5$ V, $I_C = 0$ * DC Current Gain $V_{CE} = 5$ V, $I_C = 4.5$ A 2.25 * Collector-Emitter Saturation Voltage $I_C = 4.5$ A, $I_B = 2$ A	

^{*} Pulse Test: PW = 300µs, duty cycle = 1.5% Pulsed

Typical Characteristics

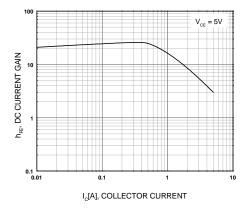


Figure 1. Static Characteristic

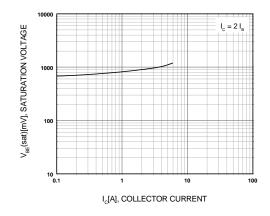


Figure 2. Base-Emitter Saturation Voltage

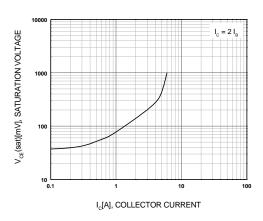


Figure 3. Collector-Emitter Saturation Voltage

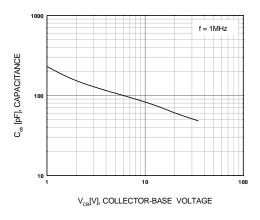


Figure 4. Collector Output Capacitance

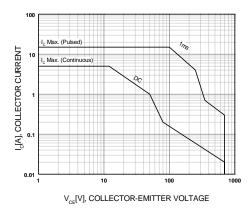


Figure 5. Safe Operating Area

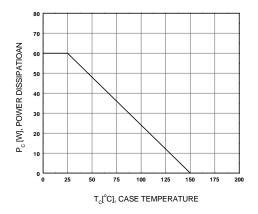
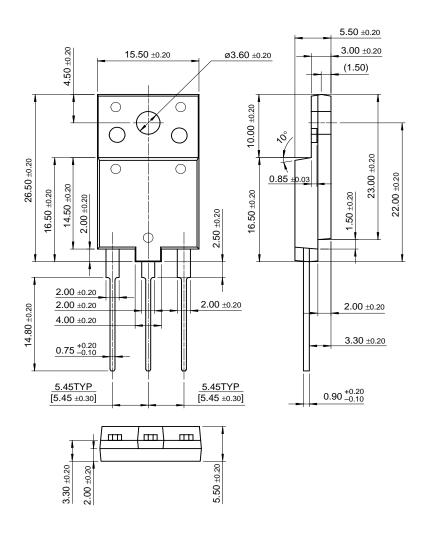


Figure 6. Power Derating

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Package Dimensions

TO-3PF



Dimensions in Millimeters

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